

## PATENT COOPERATION TREATY

TO

FROM the INTERNATIONAL BUREAU of the  
WORLD INTELLECTUAL PROPERTY ORGANIZATION

GAMBRELL, James, B.  
Pravel, Gambrell, Hewitt,  
Kimball & Krieger  
1177 West Loop South  
Suite 1010  
Houston, TX 77027  
United States of America

## NOTIFICATION OF CORRECTION, CANCELLATION OR WITHDRAWAL OF PRIORITY CLAIM

Issued pursuant to PCT Rules 4.10(d) , 32bis  
and Administrative Instructions, Sections 402(c)  
and (d) and 415

DATE OF MAILING 19 May 1988  
by the International Bureau (19.05.88)

APPLICANT'S OR AGENT'S FILE REFERENCE  
CIP81297PC

## IDENTIFICATION OF THE INTERNATIONAL APPLICATION

International Application No.

PCT/US87/02958

International Filing Date

09 November 1987 (09.11.87)

Applicant (Name)

UNIVERSITY OF HOUSTON-UNIVERSITY PARK

## NOTIFICATION

The applicant is hereby notified that the International Bureau has  
taken the following action in respect of the above-identified  
international application:

1. ☒ The recording of the filing date of the earlier application,  
the priority of which is claimed, has ~~XXXXXX~~ been corrected / to indicate the following  
date:

..27..January..1987..(27.01.87)

ex officio

(corrected filing date)

2. ☐ The priority claim has been cancelled ex officio.  
3. ☐ The priority claim has been cancelled in accordance with  
applicant's request.  
4. ☐ The priority claim has been noted as withdrawn in accordance  
with the applicant's request received on .....

- ☒ In the case where multiple priorities have been claimed,  
the above action related to the following particular  
priority claim(s): 26 January 1987 (26.01.87)

A copy of this notification has been sent to the receiving Office,  
the International Searching Authority and

- ☒ the designated Offices  
☐ the International Preliminary Examining Authority

THE INTERNATIONAL BUREAU OF THE WORLD INTELLECTUAL PROPERTY ORGANIZATION

Mailing Address

WIPO  
34, chemin des Colombettes  
1211 Geneva 20  
Switzerland

Authorized Officer

Y. Coeckelbergs

3-2481

## PATENT COOPERATION TREATY

NOTIFICATION  
CONCERNING SUBMISSION  
OF PRIORITY DOCUMENT  
issued under Section 411 of  
the PCT Administrative  
Instructions

INTERNATIONAL APPLICATION No. PCT/US87/02958

To:

GAMBRELL, James, B.  
Pravel, Gambrell, Hewitt, Kimball & Krieger  
1177 West Loop South  
Suite 1010  
Houston, TX 77027  
ÉTATS-UNIS D'AMÉRIQUE

DATE OF MAILING OF  
THIS NOTIFICATION:  
19 May 1988 (19.05.88)

APPLICANT'S OR AGENT'S  
FILE REFERENCE:  
CIP81297PC

From:

The International Bureau of WIPO  
1211 Geneva 20  
Switzerland

INTERNATIONAL FILING DATE:

09 November 1987 (09.11.87)

PRIORITY DATE(S) CLAIMED:

12 January 1987 (12.01.87) X

27 January 1987 (27.01.87) X

06 February 1987 (06.02.87)

26 March 1987 (26.03.87)

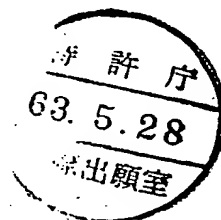
DATE OF RECEIPT OF PRIORITY DOCUMENT(S):

29 March 1988 (29.03.88)

The priority document(s) received is (are) a copy (copies) of the application(s)  
filed on 12 January 1987 (12.01.87) 06 February 1987 (06.02.87)  
27 January 1987 (27.01.87)

A copy of this Notification is being sent to each designated Office.

Y. Coeckelbergs  
(Authorized Officer)



3-2481

## PATENT COOPERATION TREATY

NOTIFICATION  
CONCERNING SUBMISSION  
OF PRIORITY DOCUMENT  
issued under Section 411 of  
the PCT Administrative  
Instructions

INTERNATIONAL APPLICATION No. PCT/US87/02958

To:

GAMBRELL, James, B.  
Pravel, Gambrell, Hewitt, Kimball & Krieger  
1177 West Loop South  
Suite 1010  
Houston, TX 77027  
ÉTATS-UNIS D'AMÉRIQUE

DATE OF MAILING OF  
THIS NOTIFICATION:  
15 June 1988 (15.06.88)

APPLICANT'S OR AGENT'S  
FILE REFERENCE:  
CIP81297PC

From:  
The International Bureau of WIPO  
1211 Geneva 20  
Switzerland

INTERNATIONAL FILING DATE:  
09 November 1987 (09.11.87)

PRIORITY DATE(S) CLAIMED:  
12 January 1987 (12.01.87)  
27 January 1987 (27.01.87)  
06 February 1987 (06.02.87)  
26 March 1987 (26.03.87)

DATE OF RECEIPT OF PRIORITY DOCUMENT(S):

09 NOVEMBER 1987 (09.11.87)

The priority document(s) received is (are) a copy (copies) of the application(s)  
filed on

26 MARCH 1987 (26.03.87)

A copy of this Notification is being sent to each designated Office.

L. Schwarz  
(Authorized Officer)



DATE OF MAILING  
14 July 1988 (14.07.88)

COMMUNICATION OF  
INTERNATIONAL APPLICATIONS  
under PCT Article 20

To:  
Japanese Patent Office  
Tokyo

in its capacity as a designated Office

From : The International Bureau of WIPO  
1211 Geneva 20  
Switzerland

Pursuant to PCT Article 20 and PCT Rule 47, the International Bureau herewith transmits copies of the international applications having the following international application and international publication numbers:

INT. APPL. NO.	INT. PUBL. NO.	INT. APPL. NO.	INT. PUBL. NO.
PCT/AT87/00073	WO88/05208	PCT/DE87/00611	WO88/04950
PCT/AT87/00078	WO88/04892	PCT/DE88/00001	WO88/05122
PCT/AT87/00079	WO88/04893	PCT/DE88/00002	WO88/05126
PCT/AU86/00396	WO88/04903	PCT/DE88/00003	WO88/05124
PCT/AU87/00006	WO88/05169	PCT/DE88/00004	WO88/04972
PCT/AU87/00406	WO88/05120	PCT/DE88/00008	WO88/05134
PCT/AU87/00437	WO88/04983	PCT/DK87/00162	WO88/05024
PCT/AU87/00442	WO88/04944	PCT/DK87/00164	WO88/05023
PCT/AU87/00443	WO88/05035	PCT/DK88/00001	WO88/04886
PCT/AU87/00444	WO88/05131	PCT/DK88/00002	WO88/04902
PCT/AU87/00445	WO88/05160	PCT/DK88/00003	WO88/05041
PCT/AU87/00447	WO88/05021	PCT/DK88/00004	WO88/05105
PCT/AU88/00001	WO88/05223	PCT/EP86/00784	WO88/05172
PCT/AU88/00003	WO88/04896	PCT/EP87/00728	WO88/05004
PCT/AU88/00004	WO88/05006	PCT/EP87/00753	WO88/04946
PCT/CH86/00180	WO88/05220	PCT/EP87/00803	WO88/04957
PCT/CH87/00173	WO88/05149	PCT/EP87/00808	WO88/05150
PCT/CH88/00001	WO88/05011	PCT/EP87/00815	WO88/05043
PCT/CH88/00004	WO88/04905	PCT/EP87/00817	WO88/05151
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PCT/DE87/00569	WO88/05130	PCT/EP87/00829	WO88/04916
PCT/DE87/00570	WO88/05128	PCT/EP88/00007	WO88/04998
PCT/DE87/00579	WO88/04898	PCT/EP88/00019	WO88/05164
PCT/DE87/00601	WO88/04884	PCT/FI86/00156	WO88/05171
PCT/DE87/00604	WO88/05204	PCT/FI87/00174	WO88/04955
PCT/DE87/00605	WO88/05141	PCT/FI87/00175	WO88/04956
PCT/DE87/00610	WO88/05119	PCT/FI87/00176	WO88/05090

特許庁

63.7.18

国際出願室

C. Grassioulet  
(Authorized Officer)

**RECORD COPY**

**INTERNATIONAL APPLICATION  
UNDER THE  
PATENT COOPERATION TREATY  
REQUEST**

THE UNDERSIGNED REQUESTS THAT THE PRESENT  
INTERNATIONAL APPLICATION BE PROCESSED  
ACCORDING TO THE PATENT COOPERATION TREATY

(The following is to be filled in by receiving Office)  
INTERNATIONAL APPLICATION No **PCT/US 87/02958**

INTERNATIONAL FILING DATE: **09 NOV 1987**

(Stamp)  
Name of Receiving Office and "PCT International Application"  
**RO/US**

Applicant's or Agent's File Reference  
(indicated by applicant if desired) **GIP81297PCT]**

**Box No. I TITLE OF INVENTION**

**SUPERCONDUCTIVITY IN SQUARE-PLANAR COMPOUND SYSTEMS**

**Box No. II APPLICANT (WHETHER OR NOT ALSO INVENTOR); DESIGNATED STATES FOR WHICH HE/SHE/IT IS APPLICANT.** Use this box for indicating the applicant or, if there are several applicants, one of them. If more than one person (includes, where applicable, a legal entity) is involved, continue in Box No. III.

The person identified in this box is (check one only): ☐ applicant and inventor\* ☒ applicant only

Name and address:\*\*

University of Houston-University Park  
4800 Calhoun Road  
Houston, Texas 77004  
United States of America

Telephone number: **713/749-3412** Telegraphic address:

Teleprinter address:

Country of nationality: **United States of America**

Country of residence: **United States of America**

The person identified in this box is *applicant* for the purposes of (check one only):

☒ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the "Supplemental Box"

**Box No. III FURTHER APPLICANTS, IF ANY; (FURTHER) INVENTORS, IF ANY; DESIGNATED STATES FOR WHICH THEY ARE APPLICANTS (IF APPLICABLE).** A separate sub-box has to be filled in in respect of each person (includes, where applicable, a legal entity). If the following two sub-boxes are insufficient, continue in the "Supplemental Box," (giving there for each additional person the same indications as those requested in the following two sub-boxes) or by using a "continuation sheet."

The person identified in this sub-box is (check one only): ☐ applicant and inventor\* ☐ applicant only ☒ inventor only\*

Name and address:\*\*

CHU, Ching-Wu  
4800 Calhoun Road  
Houston, Texas 77004  
United States of America

If the person identified in this sub-box is *applicant* (or *applicant and inventor*), indicate also:

Country of nationality:

Country of residence:\*\*\*

and whether that person is *applicant* for the purposes of (check one only):

☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the "Supplemental Box"

The person identified in this sub-box is (check one only): ☐ applicant and inventor\* ☐ applicant only ☐ inventor only\*

Name and address:\*\*

If the person identified in this sub-box is *applicant* (or *applicant and inventor*), indicate also:

Country of nationality:

Country of residence:\*\*\*

and whether that person is *applicant* for the purposes of (check one only):

☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the "Supplemental Box"

\* If the person indicated as "applicant and inventor" or as "inventor only" is not an *inventor* for the purposes of all the designated States, give the necessary indications in the "Supplemental box."

\*\* Indicate the name of a natural person by giving his/her family name first followed by the given name(s). Indicate the name of a legal entity by its full official designation. In the address, include both the postal code (if any) and the country (name).

\*\*\* If residence is not indicated, it will be assumed that the country of residence is the same as the country indicated in the address.

Box No. IV AGENT (IF ANY) OR COMMON REPRESENTATIVE (IF ANY); ADDRESS FOR NOTIFICATIONS (IN CERTAIN CASES) A common representative may be appointed only if there are several applicants and if no agent is or has been appointed; the common representative must be one of the applicants.  
The following person (includes, where applicable, a legal entity) is hereby appointed as agent or common representative to act on behalf of the applicant(s) before the competent International Authorities: **PRAVEL, GAMBRELL, HEWITT, KIMBALL AND KRIEGER, P.C.T.**  
Name and address, including postal code and country:

**James B. Gambrell**  
**PRAVEL, GAMBRELL, HEWITT, KIMBALL & KRIEGER**  
**1177 West Loop South, Suite 1010**  
**Houston, Texas 77027**  
**United States of America**

If the space below is used instead for an address for notifications\*, check here ☐

Telephone number: 713850-0909 Telegraphic address: 792026  
(including area code) **TEXPATHOU**

Teleprinter address: 713850-0165

Box No. V DESIGNATION OF STATES; POSSIBLE CHOICE OF EUROPEAN PATENT; POSSIBLE CHOICES OF CERTAIN KINDS OF PROTECTION OR TREATMENT. Where the name of a State is followed by two check boxes, either or both of the boxes may be checked. The checking of both boxes results in both a European and a national patent being requested for the same State. Designation of Switzerland includes designation of Liechtenstein (and vice-versa).

The following States are hereby designated:\*\*\* European Patent National Patent (if other national title or treatment desired, specify)\*\*

AT	Austria	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
AU	Australia	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
BB	Barbados	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
BE	Belgium	<input type="checkbox"/>	[no national title available]	
BG	Bulgaria	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
BR	Brazil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
CH and LI	Switzerland and Liechtenstein	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
DE	Federal Republic of Germany	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
DK	Denmark	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
FI	Finland	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
FR	France	<input type="checkbox"/>	[no national title available]	
GB	United Kingdom	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
HU	Hungary	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
IT	Italy	<input type="checkbox"/>	[no national title available]	
JP	Japan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
KP	Democratic People's Republic of Korea	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
KR	Republic of Korea	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
LK	Sri Lanka	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
LU	Luxembourg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
MC	Monaco	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
MG	Madagascar	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
MW	Malawi	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
NL	Netherlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
NO	Norway	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
RO	Romania	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
SD	Sudan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
SE	Sweden	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
SU	Soviet Union	<input type="checkbox"/>	<input checked="" type="checkbox"/>	** .....
US	United States of America	<input type="checkbox"/>	<input type="checkbox"/>	** .....
EP	all PCT Contracting States for which a European patent may be requested	<input checked="" type="checkbox"/>	**** these States are those listed above whose names are preceded by the codes AT, BE, CH and LI, DE, FR, GB, IT, LU, NL and SE	
OA	OAPI (Cameroon, Central African Republic, Chad, Congo, Gabon, Mali, Mauritania, Senegal, Togo)	<input checked="" type="checkbox"/>	OAPI Patent (if other OAPI title desired, specify)**	

Space reserved for designating countries which become party to the PCT after the issuance of the present form (March 28, 1985):  
**Benin (OAPI)**

- \* An address for the sending of notifications for a sole applicant or for a common representative may be indicated if no agent has been appointed to represent the applicant or, if there are several applicants, all of them.
- \*\* If another kind of protection or a title of addition is desired or if, in the United States of America, treatment as a continuation or a continuation in part is desired, indicate according to the instructions given in the Notes to Box No. V.
- \*\*\* The applicant's choice of the order of the designations may be indicated by checking the boxes of the designated States with sequential arabic numerals (see also the Notes to Box No. V).
- \*\*\*\* When this box is checked, none of the other boxes in the column "European patent" should be checked.

**Supplemental Box.** Use this box in the following cases:

- (i) if more than three persons are involved as applicants and/or inventors; in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III;
- (ii) if, in Box No. II or any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box," is checked; in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the country or countries (or EP or OA, if applicable) for the purposes of which he/she/it is applicant;
- (iii) if, in Box No. II or any of the sub-boxes of Box No. III, a person indicated as "applicant and inventor" or "inventor only" is not inventor for the purposes of all designated States or for the purposes of the United States of America; in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor and, next to such name, the country or countries (or EP or OA, if applicable) for the purposes of which the named person is inventor;
- (iv) if there is more than one agent and their addresses are not the same; in such case, write "Continuation of Box No. IV" and indicate for each additional agent the same type of information as required in Box No. IV;
- (v) if, in Box No. V, the name of any country (or OAPI) is accompanied by the indication "patent of addition," "certificate of addition," or "inventor's certificate of addition," or if, in Box No. V, the name of the United States of America is accompanied by an indication "Continuation" or "Continuation in part"; in such case, write "Continuation of Box No. V" and the name of each country involved (or OAPI), and after the name of each such country (or OAPI), the number of the parent title or parent application and the date of grant of parent title or filing of parent application;
- (vi) if there are more than three earlier applications whose priority is claimed; in such case, indicate "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI;
- (vii) if, in any of the Boxes, the space is insufficient to furnish all the information; in such case, write "Continuation of Box No. ..." [indicate the number of the Box] and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient.

CONTINUATION OF BOX NO. VI

(4) US

(26.03.87)  
26 March 1987 032,041

If this Supplemental Box is not used, this sheet need not be included in the Request.

**Box No. VI PRIORITY CLAIM (IF ANY).** The priority of the following earlier application(s) is hereby claimed:

Country (country in which it was filed if national application; one of the countries for which it was filed if regional or international application)	Filing Date (day, month, year)	Application No.	Office of Filing (fill in only if the earlier application is an international application or a regional application)
(1) US	(12.06.87) 12 January 1987	002,089	
(2) US	(25.01.87) 25 January 1987	006,991	
(3) US	(06.02.87) 06 February 1987	012,205	

(Letter codes may be used to indicate country and/or Office of filing)

When the earlier application was filed with the Office which, for the purposes of the present international application, is the receiving Office, the applicant may, against payment of the required fee, ask the following:

☒ the receiving Office is hereby requested to prepare and transmit to the International Bureau a certified copy of the above-mentioned earlier application/of the earlier applications identified above by the numbers (insert the applicable numbers) **1; 2; 3; 4**

**Box No. VII EARLIER SEARCH (IF ANY).** Fill in where a search (international, international-type or other) by the International Searching Authority has already been requested (or completed) and the said Authority is now requested to base the international search, to the extent possible, on the results of the said earlier search. Identify such search or request either by reference to the relevant application (or the translation thereof) or by reference to the search request.

International application number or number and country (or regional Office) of other application:

International/regional/national filing date

Date of request for search:

Number (if available) given to search request:

**Box No. VIII SIGNATURE OF APPLICANT(S) OR AGENT**

  
Terry Ondreyka

Assistant Vice President for Business Affairs  
University of Houston - University Park

If the present Request form is signed on behalf of any applicant by an agent, a separate power of attorney appointing the agent and signed by the applicant is required. If in such case it is desired to make use of a general power of attorney (deposited with the receiving Office), a copy thereof must be attached to this form.

**Box No. IX CHECK LIST (To be filled in by the Applicant)**

This international application contains the following number of sheets:

- |                |                  |
|----------------|------------------|
| 1. request     | 4 sheets         |
| 2. description | 31 sheets        |
| 3. claims      | 10 sheets        |
| 4. abstract    | 1 sheets         |
| 5. drawings    | 5 sheets         |
| <b>Total</b>   | <b>51 sheets</b> |

Figure number ..... of the drawings (if any) is suggested to accompany the abstract for publication.

This international application as filed is accompanied by the items checked below:

1. ☐ separate signed power of attorney
2. ☐ copy of general power of attorney
3. ☐ priority document(s) (see Box No. VI)
4. ☐ receipt of the fees paid or revenue stamps
5. ☒ cheque for the payment of fees
6. ☒ request to charge deposit account
7. ☐ other document (specify)

(The following is to be filled in by the receiving Office)

1. Date of actual receipt of the purported international application: **01 Rec'd PCT/PTC 09 NOV 1987**
2. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:
3. Date of timely receipt of the required corrections under Article 11 of the PCT:
4. Drawings ☐ Received ☐ No Drawings

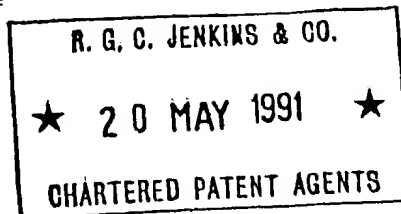
(The following is to be filled in by the International Bureau)

Date of receipt of the record copy: **29 MARCH 1988** **(29.03.88)**



COPY

Milhench, Howard Leslie  
R.G.C. Jenkins & Co.  
26 Caxton Street  
London SW1H 0RJ  
GRANDE BRETAGNE



Datum/Date

16. 05. 91

Zeichen/Ref/Ref J.18281 EP	Anmeldung Nr. /Application No. /Demande n° //Patent Nr. /Patent No. /Brevet n° 8 730 9081.5-2208/
Anmelder /Applicant /Demandeur //Patentinhaber /Proprietor /Titulaire SEMICONDUCTOR ENERGY LABORATORY CO., LTD.	

Please  
give the  
complete  
application  
number in  
all com-  
munications

**Communication pursuant to Article 96(2) and Rule 51(2) EPC**

The /further/ examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of four months

from the notification of this communication, this period being computed in accordance with Rules 78(3) and 83(2) and (4) EPC.

Amendments to the description, claims and drawings are to be filed where appropriate within the said period in **three copies** on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).

**Telephone numbers:**

Primary examiner  
(substantive examination)

(0 89) 23 99- 2284

Formalities officer  
(Formalities including extension of time limits)

(0 89) 23 99- 2729

Examiners' clerk  
(other matters)

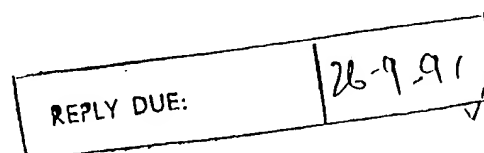
(0 89) 23 99- 2281

Enclosures: 6 page/s reasons (Form 2044/2906)

*W. Korb*  
W. Korb  
Primary examiner  
for the Examining Division

DA-26

R gistered letter





16. 05. 91

The examination is being carried out on the following application documents:

The application documents as originally filed

\*\*\*\*\*

1. The application does not meet the requirements of Article 84 EPC, because claims 3, 20, 21 are not clear.
2. A general formula of the type as claimed in Claim 3 is usually used to indicate a mixed crystal. B and B' can apparently be the same alkaline earth elements only differing in their contents x and x' in the different components of the mixed crystal. It is not clear from Claim 3 how the general formula for the mixed crystal is included by the general formula of Claim 1 to which Claim 3 refers, in particular in view of the limits for x, y, z and w as set forth in Claim 1.
3. "A method for producing a superconducting ceramic" as claimed in Claim 20 must be construed as meaning merely a method suitable for the stated purpose (see EPO Guidelines C-III, 4.8). Therefore, Claim 20 should read "a method of producing a superconducting ceramic". Furthermore, "carbides" should apparently read "carbonates" since no support for a use of carbides is given by the description, in particular the examples.
4. From Claim 21, it is not clear how the relative term "large crystalline particles" is limiting the subject-matter claimed with regard to other polycrystalline perovskite-like structures.



Bescheid/Protokoll (Anlage)	Communication/Minutes (Annex)	Notification/Procès-verbal (Annexe)
Datum Date Date	Blatt Sheet Feuille	Anmelde-Nr.: Application No.: Demande n°:
16.05.91	2	87 309 081.5

5. The following documents (D) are mentioned for the first time in this communication; the numbering will be adhered to in the rest of the procedure:

D1 = Z. Phys. B - Condensed Matter 66, pp. 141-146,  
10.03.87, C. Politis and J. Geerk  
D2 = Phys. Rev. Lett., Vol. 58, no. 9, pp. 908-910,  
02.03.87, M.K. Wu et al.  
D3 = EP-A-0 274 421  
D4 = EP-A-0 274 407  
D5 = WO-A-88/07 264  
D6 = EP-A-0 282 360

It should be noted that documents D3-D6 represent a state of the art according to Article 54 (3) EPC.

6. The present application does not meet the requirements of Articles 52(1) and 54(1) and (2) EPC because the subject-matter of claims 1-5, 7, 9, 12-17, 20, 21 is not new.

It should be noted that the novelty<sup>of</sup> Claims 3, 20 and 21 is objected to insofar as the present text of these claims can be understood.

7. The document D1 discloses a superconducting ceramic of the formula  $\text{La}_{1-x} \text{Sr}_{0.1} \text{Ba}_{0.1} \text{CuO}_4$  (see D1, page 142, col. 2, lines 17-22 and page 144, column 1, line 23-column 2, line 3).

It is apparent that the above formula can as well be expressed by  $[\text{La}_{0.9} (\text{Sr}, \text{Ba})_{0.1}]_2 \text{CuO}_4$  and with  $\text{La} = \text{A}$ ,  $(\text{Sr}, \text{Ba}) = \text{B}$  the material known from D1 falls within the scope of the materials according to the formula claimed in Claim 1. Therefore, the subject-matter as claimed in Claim 1 is not new, contrary to Articles 52 (1) and 54

Datum  
Date  
Date

16. 05. 91

Blatt  
Sheet  
Feuille

3

Anmelde-Nr.: 87 309 081.5  
Application No.:  
Demande n°:

(1') and (2) EPC. Furthermore, materials falling within the scope of Claim 1 are also known from the documents D3 (see e.g. D3, pages 5, 6; tables 1, 2), D4 (see D4, page 5, lines 10-45; pages 7, 8; table; and Claim 1) and D5 (see D5, page 14; table; and Claim 1). Additionally, the general formula as a whole can directly and unambiguously be derived from D6 (see e.g. D6, page 2, column 2, lines 9-19 and page 4, column 6, lines 33-43). A small range disclaimed in Claim 1 from the total range of that formula due to B being more than one alkaline earth element when A is one rare earth element merely in order to exclude well-known materials (see e.g. D1, abstract and D2, abstract and page 908, column 1, lines 1-20) does not result in a particular selection of materials which must be considered as new with respect to the disclosure of D6. The formula disclosed in D6 represents the same variety of materials as claimed in Claim 1 in the case where A is more than one rare earth element. Moreover, from the examples mentioned in D6 at page 2, column 2, lines 9-19 and page 4, column 6, lines 43-61 it is implicit to a skilled man that compounds according to the general formula in question can in any case contain two or more alkaline earth elements, in particular when A is one rare earth element. Therefore, the subject-matter as claimed in Claim 1 is also not new with respect to one of the documents D3, D4 or D6.

8. To a skilled man, it is implicit, that the general formula expressed in D6 (see D6, page 4, column 6; lines 33-43) includes mixed phases. The examples mentioned in D6 at page 2, column 2, lines 9-19, in particular the YBCO-system, the BLCO-system or the SLCO-system represent mixed phase compound systems which can be expressed by a modified general formula as claimed in Claim 3. Thus the subject-matter of that claim is directly derivable from D6 and Claim 3 lacks novelty



required by Articles 52 (1) and 54 (1) and (2) EPC.

9. To a skilled man knowing the general formula expressed in D6 (see D6, page 4, column 6, lines 33-43) it is implicit that this formula embraces the sub-species according to the general formulas claimed in Claims 12, 14 and 16. The examples mentioned in D6 at page 2, column 2, lines 9-19 and page 4, column 6, lines 43-61 indicate such sub-species. Therefore, Claims 12, 14 and 16 are considered not new with respect to the disclosure of D6. Furthermore, it should be noted that a material known from D1 (see item 7 above) falls within the scope of materials according to the formula claimed in Claim 12 and materials known from the documents D3, D4 or D5 (see item 7 above) must be regarded as materials according to the formula claimed in Claim 16 such that Claim 12 is also not new with respect to D1 and Claim 16 is also not new with respect to one of the documents D3, D4 or D5.
10. It should be noted that there is no doubt that the entire variety of materials falling within the scope of one of the general formulas as claimed in Claims 1, 3, 12, 14 and 16 cannot be regarded as being disclosed in the present application in a manner sufficiently clear and, above all, complete. Thus, the requirements of Article 83 EPC are not met.
11. The values for y, z, w or y', z', w' respectively as claimed in Claims 4, 13, 15 and 17 are as well known from D6 (see D6, page 4, column 6, lines 33-43). Therefore, the subject-matter of these claims is not new with respect to D6.
12. A superconducting ceramic having the stoichiometric formula  $Y Ba Ca Cu_x O_{6-x}$  is known from D4 (see D4; pages

16.05.91

87 309 081.5

7, 8; table; example 15 and page 3, lines 11-48).

Therefore, the subject-matter claimed in Claim 7 is not new. Since that claim refers to Claim 5 and, indirectly, to Claims 4 and 3 and represents a particular material selected from the scope of the claims to which it refers, moreover Claims 3-5 must be considered as not new with respect to the disclosure of D4. In this connection, Claim 9 appears to be as well not new with respect to the examples disclosed in D4 and comprising more than one rare earth element (see D4; pages 7, 8; table).

13. It should be noted that the documents D1, D2, either standing alone or in combination, appear to be relevant in view of inventive step for example with respect to Claims 6, 8, 10, 11, 18 and 19. The materials according to these claims do not appear to show any surprising effect, for example a particularly high critical transition temperature departing from state of the art materials as e.g. known from D2.
14. The method claimed in Claim 20 can directly and unambiguously be derived from any of the documents cited in view of a lack of novelty in above items (see e.g. D1, pages 141 and 142, "Experimental Procedures"). Therefore, Claim 20 lacks novelty required by Articles 52 (1) and 54 (1) and (2) EPC.
15. A ceramic comprising two or more rare earth elements and/or two or more alkaline earth elements as claimed in Claim 21 is e.g. known from D4 (see item 12 above). Since a skilled man producing such a composition would inevitably arrive at a result falling within the terms of Claim 21 an objection of lack of novelty must be raised. Claim 21 is considered to be not new, e.g. with respect to D4.

Datum  
Date  
Date

16. 05. 91

Blatt  
Sheet  
Feuille

6

Anmelde-Nr.: 87 309 081.5  
Application No.:  
Demande n°:

16. If the applicant wants to proceed with the application, it should be noted that any amendments made must be identified if not evident and their base in the original application has to be indicated (see EPO Guidelines E-II, 1). The applicant should also indicate in the letter of reply the difference vis-à-vis the state of the art and the significance thereof if a new claim is filed which the applicant regards to present some particular patentable matter.